

ABSTRACT OF THE DISCLOSURE

An antenna apparatus coupled to a feeding point arranged on a cavity is disclosed. The apparatus includes a linear element extending from the feeding point and having a physical length that is shorter than
5 a one-quarter wavelength. A half-wave antenna element is connected to an end of the linear element. The apparatus also includes a metal conductor piece including a connecting point between the linear element
10 and the half-wave antenna element and located close to one surface of the cavity. The linear element includes a first portion extending in a first direction opposite to that of the half-wave element from the feeding point and in parallel with one surface of the cavity and a
15 second portion extending in a second direction, which is equal to a direction in which the half-wave antenna element extends, and in parallel with one surface of the cavity.